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**RESTRICTED USE PESTICIDE  
(GROUND AND SURFACE WATER CONCERNS)**

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

THIS PRODUCT IS A RESTRICTED USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

Support Document #67

**ATRAZINE 4L HERBICIDE**

For Season-Long Weed Control In Corn, Sorghum, And Certain Other Crops.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

See Additional Precautionary Statements And Directions For Use On Back Panel

**ACTIVE INGREDIENTS:**

Atrazine: 2-chloro-4-ethylamino-6-isopropylamino-s-triazine ..... 40.8%

Related Compounds ..... 2.2%

INERT INGREDIENTS ..... 57.0%

Total ..... 100.0%

Atrazine 4L Contains 4 Lbs. Active Ingredients Per Gallon. Shake Well Before Using. Use Entire Contents At One Time.

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

NOV 18 1994

Net Contents: 2 1/2 Gallons

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

1386-647

EPA Reg. No. 1386-647  
EPA Est. No. 1386-OH-1



## Precautionary Statements

Hazards to Humans and Domestic Animals

### CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Do not breathe vapors or spray mist. Avoid contact with eyes, skin or clothing.

### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks

Mixers and loaders must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Controls Statements:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

**Statement of Practical Treatment**

If swallowed: Call a physician or glasses of water and induce vomiting available, by administering syrup by mouth to an unconscious person.

If inhaled: Remove victim to fresh air, preferably mouth-to-mouth. Get medical attention.

If on skin: Wash with plenty of water.

If in eyes: Flush eyes with plenty of water.

**Note to Physician:** There is no antidote. Induce emesis or lavage. Activated charcoal may be considered.

**For Medical Emergency Extension 138.**

### Environmental Hazards

Atrazine can travel (seep or leach) and may be used as drinking water. It is advised not to apply atrazine to ground water. This product may be used on well-drained. Your local agricultural type of soil in your area and the type of crop.

This product may not be mixed, abandoned wells, drainage well loaded within 50 feet of intermittent and reservoirs. This product may be applied to the points where field surface streams and rivers or within 200 yards. If this product is applied to runoff entry points must be closed.

This pesticide is toxic to aquatic life where surface water is present. Do not apply when wind and drift from treated areas may reach water. Do not contaminate water.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this pesticide in a manner inconsistent with its labeling.

For any requirements specify the agency responsible.

**FAILURE TO FOLLOW THE DIRECTIONS ON THE LABEL MAY RESULT IN PESTICIDE RESIDUES.**

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Waterproof gloves
- Chemical-resistant footwear plus socks

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT covered by the Worker Protection Standard (40 CFR Part 170). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter treated areas until sprays have dried. Warnings must be given to be in a treated area. Do not be treated with this product. Do not be given which information that may not be entered clothing until sprays have dried. Do not take action as described under this label. When oral warnings shall be given in a 1 by workers. Oral warning is reason to believe be understood, by workers include the following treated with Atrazine. Do not enter without until sprays have dried.

### CHEMIGATION PROHIBITION

Do not apply this product using a chemigation system.

**BEST 1**

## General Information

This herbicide controls many annual broadleaf and grass weeds in corn, sorghum, sugarcane, and certain other crops specified on this label. This product may be applied before or after weeds emerge.

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected, and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of this product in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide. Consult with your state Agricultural Extension Service for specific recommendations.

Since this product acts mainly through root absorption, its effectiveness depends on moisture to move it into the root zone. If weeds develop, a shallow cultivation or rotary hoeing will generally result in better weed control.

This product is noncorrosive to equipment and metal surfaces, nonflammable, and has low electrical conductivity.

Avoid using near adjacent desirable plants or in greenhouses, or injury may occur.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

Where the use directions give a range of rates, use the lower rate on coarse-textured soil and soil low in organic matter; use the higher rate on fine-textured soil and soil high in organic matter.

**NOTE:** Universal Cooperatives, Inc., does not recommend applications in combination with other herbicides or oils, except as specifically described on the label.

## Application Procedures

**Ground application:** Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and are the same size. Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 10 gals. of spray mixture/A for all preplant incorporated, preplant surface, preemergence, and postemergence applications (with or without oil or surfactant) with ground equipment.

Use a pump with capacity to (1) maintain 35-40 psi at nozzles, (2) provide sufficient agitation in tank to keep mixture in suspension, and (3) to provide a minimum of 20% bypass at all times. Use centrifugal pumps which provide propeller shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gals./minute/100 gal. tank size circulate 1 through a correctly positioned sparger tube or jets.

Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 80-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

For band applications, calculate amount

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast per acre}$$

**Aerial application:** Use aerial application specified. Apply in a minimum of 1 qt. of spray mixture/A. For postemergence treatments use a minimum of 2 gals. of water/A. Avoid coverage cannot be obtained or where

Avoid application to humans or animals spray mist and prolonged contact with and at the end of each day's operation.

Application in water or liquid fertilizer may replace all or part of the water as a preplant surface ground application. This product with liquid fertilizer and/or not apply in nitrogen solution or complex or crop injury may occur.

**Compatibility Test:** Since liquid fertilizer always check compatibility with herbicide. Be careful when using complete fertilizer problems are more likely to occur. Compatibility in some instances. The following are for other spray volumes, make compatibility using this procedure:

1. Add 1 pint of fertilizer to each of 2 or
2. To one of the milliliters of a for this use, it is equivalent to Shake or stir gently

3. To both jars add the appropriate amount used, add them separately with dry concentrates last. After each add appropriate amount of herbicide to

**Dry herbicides:** For each pound each jar.

**Liquid herbicides:** For each pint 1 milliliters to each jar.

4. After adding all ingredients, put lids on jars. Let the mixtures stand 15 minutes. Let the mixtures stand 15 minutes. Let the mixtures stand 15 minutes. If the compatibility agent is needed either mixture separates, but can be long as good agitation is used. If methods of improving compatibility: tion, or (B) add 1/2 of the compatibility emulsifier concentrate or flowable compatibility is still observed, do not use

**BEST AVAILABLE**

Application in water plus emulsifiable oil or oil concentrate: Adding emulsifiable oil (petroleum-derived, petroleum-derived oil concentrate, or single or mixed crop-derived oil concentrate) to postemergence water-based sprays in corn and sorghum may improve weed control. However, under certain conditions, the use of either type of oil may seriously injure the crop. To minimize this possibility, observe the following directions:

Use one of the following properly emulsified:

1. A suitable oil concentrate containing at least 1% but not more than 20% suitable emulsifier or surfactant blend.
2. Petroleum-derived oil containing at least 1% suitable emulsifier.

**NOTE:** In the event of a compatibility problem when mixing oil with this product and water, a compatibility agent such as Kem Link should be used. Any of the above oils contaminated with water or other materials can cause compatibility problems and/or crop injury.

**Mixing procedures - all uses:** (1) Be sure sprayer is clean and not contaminated with any other materials, or crop injury or sprayer clogging may result. (2) Fill tank  $\frac{1}{2}$  full with clean water, nitrogen solution, or complete liquid fertilizer. (3) Start agitation. (4) Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface. (5) Pour product directly from container into tank. (6) Continue filling tank until 90% full. Increase agitation if necessary to maintain surface action. (7) Add emulsifiable oil, oil concentrate, or tank mix herbicide(s) after this product is thoroughly suspended. (8) Finish filling tank. (9) Empty tank as completely as possible before refilling to prevent buildup of oil or emulsifiable concentrate residue. Maintain agitation to avoid separation of materials. (10) If an oil or emulsifiable concentrate film starts to build up in tank, drain it and clean with strong detergent solution or solvent. (11) Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent.

**Rotational Crops - All Uses:** (1) Do not rotate to any crop except corn or sorghum until the following year, or injury may occur. (2) If applied after June 10, do not rotate with crops other than corn or sorghum the next year, or crop injury may occur. (3) In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use only when corn or sorghum is to follow corn or sorghum or when a crop of untreated corn or sorghum is to precede other rotational crops. (4) In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to soybeans if the rate applied to corn or sorghum was more than 2.2 lbs/A or equivalent band application rate, or soybean injury may occur. (5) Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer. (6) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes and grasses the year following application, or injury may occur.

## Atrazine 4L Applied Alone - Corn or Grain Sorghum\*

Preplant Surface-Applied, Preplant Incorporated, or Preemergence (or Post-emergence at 4 pts/A With Oil)

Broadleaf and Grass Weeds Controlled

barnyardgrass (watergrass) \*\*\*  
plantain \*\*\*  
green foxtail \*\*\*  
large (hairy) crabgrass \*\*  
wild oats  
witchgrass (*Panicum capillare*) \*\*\*  
yellow foxtail \*\*\*

Postemergence with Emulsifiable Oil c  
Broadleaf Weeds Controlled

annual morningglory	lambquarters
cocklebur	mustards
jimsonweed	pigweed

\* Where there are state/local requirements, maximum rates and/or greater set more restrictive/protective requirements established rate limitations within a lead pesticide control agency for ad to deviate from state use regulations

\*\* Partial control only.

\*\*\* Partial control only on medium- and

### Corn

Preplant Surface-Applied (Broadleaf a textured soil with minimum tillage or no-till MO, MT, ND, NE, SD, WI, and WY. Apply Table 1 up to 45 days prior to planting. Or two weeks prior to planting. If an unusual adverse environmental conditions follow appropriately labeled herbicide may t atrazine, do not exceed the labeled rate l

If weeds are present at the time of treatment herbicide (for example, Gramoxone® E precautions, and restrictions on the label

Note: To the extent possible, do not move to the surface during planting, or weed

Preplant Incorporated (Broadleaf and ing at rate in Table 1. Apply to the soil and bed preparation. Avoid deep incorporation to planting.

Preemergence or At-Planting (Broadleaf after planting before weed emergence, a

Postemergence (Broadleaf and grass e in height and before corn exceeds 12 inc

**BEST AVAILABLE COPY**

**Table 1: Broadleaf and Grass Weed Control in Corn\***

**FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE**

• **On Highly Erodible Soils (as defined by SCS)**

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 4 pts./A as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 3.2 pts./A may be applied.

• **On Soils Not Highly Erodible**

Apply 4 pts./A as a broadcast spray.

**FOR POSTEMERGENCE APPLICATION**

If no atrazine was applied prior to corn emergence, apply a maximum of 4 pts./A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (5 pts. of this product) per acre per calendar year.

\* Broadleaf control (eastern CO, western KS, western NE, NM, OK Panhandle, west TX, and eastern WY): On sand, loamy sand, sandy loam, mild to strongly alkaline soil, and all recently leveled soil, apply no more than 2.4 pts./A, either preplant surface, preplant incorporated, or preemergence. On other soils in these areas, apply rate in Table 1 for broadleaf and grass control.

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

Postemergence with emulsifiable oil or oil concentrate in water: Add the following volume of one of the type oils indicated for aerial or ground application unless the oil label specifies otherwise:

Type Oil	Ground Application	Aerial Application
Oil Concentrates (Crop or Petroleum-derived)	1 qt./A	1/2 - 1 qt./A
Petroleum-derived oil	1 gal./A	2 qts./A

**Notes:** Crop-derived or petroleum-derived oil concentrates should contain at least 1% but not more than 20% suitable emulsifier or surfactant blend. Petroleum-derived oils should contain at least 1% suitable emulsifier.

**Broadleaf and grass control:** For postemergence control of those weeds listed under Preplant Incorporated and Preemergence, broadcast 4 pts./A plus emulsifiable oil or oil concentrate after weed emergence, but before weeds reach 1.5 inches in height and before corn exceeds 12 inches in height.

**Broadleaf control:** For postemergence control of those weeds listed under Post-emergence with emulsifiable oil or oil concentrate in water, broadcast 2.4 pts./A plus emulsifiable oil or oil concentrate before pigweed and lambsquarters reach 8 inches in height and before all other weeds reach 4 inches in height. A cultivation may be necessary if all weeds are not controlled or if weeds regrow.

**Precautions:** For applications with emulsifiable oil concentrates, (1) Adding other insect materials is not recommended, because of injury. (2) Store and handle emulsifiable oil with even a small amount of water may not avoid crop injury. (3) Do not apply when conditions are poor fertility, or other factors, or wet soil. (4) Do not exceed 2.5 lbs. active ingredient per year. (5) Postemergence applications 1 inches in height.

**Tank Mixtures for Corn**

This product may be tank mixed with these grass weeds in corn:

Dual® (metolachlor)  
Dual + Gramoxone Extra  
Dual + Roundup (glyphosate)  
Dual + Princep®  
Dual + Princep + Gramoxone Extra  
Dual + Princep + Roundup  
Baston® or Ramrod® (propachlor)  
Lasso® or Lasso EC (alachlor)

Use tank mix directions appearing on the label with this product. Observe all precautions used in a particular tank mix.

**NOTE:** When the labels refer to atrazine 80W, Atrazine 4L. One lb. of 4L.

Princep 80W, Princep 4L,

In addition to the weeds listed in Table 1, 4L Applied Alone - Corn Surface-Applied, Preemergence, this controls crabgrass, fall panicum,

Broadcast tank mix before planting, at plant emergence, at rates in Table 2. Use the ratio for expected heavy infestations of corn if weeds develop.

Preplant Surface-Applied: Use on moldboard or no-tillage systems only in CO, IA,

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and WY. Apply the recommended rate of Atrazine 4L and Princep shown in Table 2 up to 45 days prior to planting. Refer to the Atrazine 4L alone section for information if weeds should develop following the early treatment. On coarse-textured soils, do not apply more than two weeks prior to planting. Refer to the Atrazine 4L Alone-Preplant Surface-Applied section of the corn label for additional details.

If weeds are present at time of treatment, apply in a tank mix combination with a contact herbicide (for example, Gramoxone Extra or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide.

Note: To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

Preplant incorporation: Apply to the soil and incorporate in the spring before, during, or after final seedbed preparation. Avoid deep incorporation. For best results, apply within two weeks prior to planting.

Preemergence: Apply during or shortly after planting, but before crop and weeds emerge.

Refer to Corn sections of this label and to Princep 80W, Princep Caliber 90, or Princep 4L labels for further directions, limitations, and precautions.

Table 2: Tank Mixtures with Princep on Corn

Soil Texture	Broadcast Rate/A			
	1:1 Ratio*		1:2 Ratio**	
	This Product	Princep 80W <sup>1</sup>	This Product	Princep 80W <sup>1</sup>
Sand, loamy sand, sandy loam	2 pts.	1.25 lbs.	1.32 pts.	1.57 lbs.
Loam, silt loam, silty clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with low organic matter	2.4 pts.	1.5 lbs.	1.8 pts.	2 lbs.
Loam, silt loam, silty clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with medium to high organic matter, and clay (including dark prairie soils of the Corn Belt)	3 pts.	1.8 lbs.	1.92 pts.	2.4 lbs.

\* For control of most weeds.

\*\* For control of expected heavy infestations of crabgrass and fall panicum.

<sup>1</sup> When using Princep Caliber 90 or Princep 4L, use equivalent rates. One lb. of Princep 80W equals 0.8 lb. of Princep Caliber 90 or 1.8 pts. of Princep 4L.

Princep 80W, Princep 4L, or Princep Caliber 90 plus Roundup: Use as tank mixture for preemergence and postemergence control of certain broadleaf and grass weeds where corn will be planted directly into a cover crop, established sod, or in previous crop residues. Refer to Roundup label for all directions, weeds controlled, precautions, and limitations.

Princep 80W, Princep 90 plus Gramoxone Extra with Princep and Gramoxone vegetation and for corn will be planted established sod, or Add this product and tank, agitating until add Gramoxone Extra such as Aquagene 90. application. Broadcast plus 1.25 - 2.5 lbs 4 pts. of Princep 4L Princep Caliber 90) Gramoxone Extra in 2 sprayed acre. Refer label for the appropriate tank mixture. after planting, but 0.5 pt. of a nonionic 90, per 100 gals. a higher rate of Gramoxone the label if existing tall. This mixture will be less than 6 inches.

Refer to further limitations and precautions on the label of Gramoxone Extra.

Precautions: For all applications to corn, do not apply more than 2.5 lbs./A active ingredient in (2) For best control of velvetleaf and other weeds, apply in a 1:1 ratio of Princep 80W to Gramoxone Extra (2.5 lbs./A active ingredient, either alone or in a tank mixture) and the injury to spring-seeded rotational crops.

Note for all applications to corn: Do not apply within 14 days following application, or illegal use.

Sorghum and Sorghum-sudan Hybrids

Preplant Surface-Applied (Broadcast) on coarse-textured soil with minimum tillage or no tillage.

MN, MO, MT, ND, NE, recommended rate of 3 up to 45 days prior to planting. If corn is of unsatisfactory length at planting, apply at a rate of 3 up to 45 days prior to planting.

from adverse environmental conditions following early treatment, a follow-up application of an appropriately labeled herbicide may be used. If the follow-up treatment includes atrazine, do not exceed the labeled rate for corn indicated in Table 1. Under dry conditions, irrigation after application is recommended to move Atrazine 4L into the soil.

If weeds are present at time of treatment, apply in a tank mix combination with a contact herbicide (for example, Gramoxone Extra or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide.

Note: To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

**Preplant Incorporated (Broadleaf and grass control):** Broadcast in spring after plowing at rate shown in Table 3. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation. For best results, apply within two weeks prior to planting.

**Preemergence (Broadleaf and grass control):** Apply during or shortly after planting, but prior to weed or crop emergence at rate shown in Table 3.

**Postemergence (Broadleaf and grass control):** Apply at rate shown in Table 3 before weeds exceed 1.5 inches in height and before sorghum exceeds 12 inches in height.

**Table 3: Broadleaf and Grass Weed Control in Sorghum<sup>1, 2</sup>**

**FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE**

- On Highly Erodible Soils (as defined by SCS)
  - If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 4 pts./A as a broadcast spray.
  - If the soil coverage with plant residue is less than 30% at planting, a maximum of 3.2 pts./A may be applied.
- On Soils Not Highly Erodible
  - Apply 4 pts./A as a broadcast spray.

**FOR POSTEMERGENCE APPLICATION**

If no atrazine was applied prior to corn emergence, apply a maximum of 4 pts./A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (5 pts. of this product) per acre per calendar year.

<sup>1</sup> Do not apply preplant surface or preplant incorporated in AL, AR, FL, GA, LA, MS, NC, NM, OK, SC, TN, or TX. Do not apply preemergence in NM, OK, or TX, except in northeast OK and the TX Gulf Coast and Blacklands areas.

<sup>2</sup> Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

In case of planting failure, sorghum or broadcast application, or injury may occur corn is replanted in untreated row mid second planting provided the maximum calendar year is not exceeded.

**Preemergence broadcast weed control CA only:** For preemergence control after bed preparation, during or after, and before the first furrow irrigation. For to thoroughly wet all soil.

**Precautions for preemergence application CA:** To avoid possible sorghum injury, do not plant in furrows. Applications to sorghum grown on exposed calcareous or alluvial soils, do not replant sorghum for 8 m immediately.

**Postemergence broadcast weed control water:** Broadcast 2.4 pts./A for control and lambquarters reach 6 inches in height. In CO, western KS, NM, OK, TX sorghum is 6-12 inches in height. In 3-leaf stage but before it exceeds 12 in ground application and 0.5 gal./A for a for ground application. A cultivation m if weeds regrow.

For the list of weed 4L Applied Alone-Corn emergence with Emulsifiable Water.

**Precautions for applications with emulsions for applications with emulsifiable**

**Postemergence broadcast weed control TX, and desert regions of AZ and surfactant after sorghum reaches 6 in height. Apply only on sandy loam**

**Precautions:** For all applications to cation tends to cause excessive corn possible crop injury. Do not apply (plowed in). Level deep planter marks sorghum growing under stress cause on highly calcareous soil may result (or disk-plow) and thoroughly till soil seeded rotational crops, regardless of preplant surface, preplant incorporated insecticide applied in-furrow are used (5 pts. of this product) per acre per emergence (except for preemergence apply to coarse-textured soils, LA, as textured soils having less than 1% emergence applications, do not app

Note: Do not graze or feed forage from treated areas for 21 days following application, or illegal residues may result.

#### Tank Mixtures for Grain Sorghum

Dual SE: Use as tank mixture with Dual SE for control of those weeds listed on the Dual SE label, as well as on this label. Use this tank mixture only on sorghum seed treated with Concep®. Refer to the Dual SE label for all directions, precautions, and limitations.

#### Winter Weed Control In Texas

For postemergence control of winter weeds only, such as henbit, seedling dock, and annual thistle on fall bedded land in the Gulf Coast and Blacklands of TX. Apply 0.8 - 1 qt./A postemergence to the weeds in November or December to land that will be planted to corn, grain sorghum, or forage sorghum the following spring. For best results, add a suitable surfactant, such as Aquagene 90, at the rate of 0.5% of the spray volume, an emulsifiable oil at the rate of 1.0% of the spray volume, or an oil concentrate at the rate of 1 qt. per acre.

Normal weed control programs may be used in the following corn, grain sorghum or forage sorghum crop.

Note: Do not plant any crops except corn, grain sorghum, or forage sorghum the spring following this treatment, or illegal residues may result.

#### Atrazine 4L Alone - Chemical Fallow

Wheat-Sorghum-Fallow: To control annual broadleaf and grass weeds following wheat harvest and in the following sorghum crop when grown under minimum tillage, broadcast 6 pts./A to wheat stubble immediately following wheat harvest. If weeds are present at application, remove them with a sweep plow or other suitable implement after application, or use an approved contact herbicide before or after the application of Atrazine 4L. Plant sorghum into wheat stubble the following spring with minimum soil disturbance. Use a surface planter or a planter leaving a shallow furrow. If weeds are present at planting, remove them with a sweep plow or other suitable implement

before planting.

For the list of weed 4L Applied Alone-Corn Surface-Applied, Preplant emergence.

Precautions: (1) Use only on silk loam or wheat-sorghum-fallow cropping sequence sorghum harvest.

Note: To avoid illegal residues, do not graze. To avoid illegal residues and crop injury, label within 18 months following treatment.

Wheat-Corn-Fallow (KS, NE): This precludes kochia, mustards, pigweed, Russian thistle, wheat during period after wheat harvest crop grown under minimum tillage.

Follow directions for use, notes, and precautions above, substituting corn for sorghum.

Wheat-Fallow-Wheat (CO, KS, ND): This precludes cheatgrass (downy brome, chess), corn, mustard, Russian thistle, wild lettuce, a period of a wheat-fallow-wheat rotation listed under Precautions. For control rate. Apply to stubble ground. Treat only

#### Tank Mixtures for Chemical Fallow

Wheat-Sorghum-Fallow or

Gramoxone Extra: In application, a tank mix may be used. Broadcast plus a suitable amount 20-60 gals. of water. Add 0.5 - 1 pt. of Aquagene 90, per acre. Add Atrazine 4L to thoroughly mix with Extra, followed by same rate of Gramoxone Extra if weeds are 4 - 6 inches tall. Will not control weeds. Apply to stubble ground same fallow period. Refer to label for further directions.

limitations.

Wheat-Fallow-Wheat (CO, KS, ND, NE, SD, and WY)

**Gramoxone Extra:** If weeds are present at application, a tank mix with Gramoxone Extra may be used. Broadcast 1 - 2 pts. of Atrazine 4L plus a suitable amount of Gramoxone Extra in 20 - 60 gals. of water/A by ground equipment. Add 0.5-1 pt. of a nonionic surfactant, such as Aquagene 90, per 100 gals. of spray mixture. Add Atrazine 4L to spray tank first and thoroughly mix with water. Then add Gramoxone Extra, followed by surfactant. Use the higher rate of Gramoxone Extra specified on the label if weeds are 4 - 6 inches tall. This mixture will not control weeds taller than 6 inches. Apply to stubble ground. Treat only once during same fallow period. Refer to Gramoxone Extra label for further directions, precautions, and limitations.

If weeds are present at application and this product is used alone, use either an approved contact herbicide before or after treatment, or tillage after treatment.

Use tillage to control weeds which escape during fallow period. Till before planting. For this product applied alone or in tank mixture with Gramoxone Extra, plant at least 2 inches deep and 12 months or more after application.

**Precautions:** To avoid crop injury, (1) Do not use on sand soil. (2) Do not treat eroded hillsides, caliche and rocky outcroppings, or exposed calcareous subsoil. (3) Do not treat soils of the Rosebud and Canyon Series in western NE and adjoining counties in CO and WY. (4) Do not treat soils with calcareous surface layers. (5) Avoid spray overlap.

**Notes:** Do not graze treated areas within 6 months after application, or illegal residues may result.

**Aerial application:** In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft., using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not

adversely affect adjacent sensitive nontarget plants, apply Atrazine 4L alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

#### Roadsides

To control certain annual weeds in established perennial grasses along roadsides in CO, KS, MT, ND, NE, SD, and WY, including cheatgrass (downy brome, chess), common

(annual) broomweed, little barley, medusahead, cast 2 pts./A in a minimum of 10 gals. of water/A by ground equipment, or after thawing in the spring up and before weeds emerge. Examples of weeds controlled are bluestem, bluegrasses, bromegrass, buffalograss, side-oats grama, switchgrass, and year. Temporary discoloration or other form may occur following application.

**Notes:** To avoid illegal residues, (1) Do not allow livestock to graze treated areas.

#### Sugarcane

For control of many broadleaf and grass weeds, Florida's paintbrush, tortoise, jungle

Atrazine 4L at time of planting but before sugarcane emerges in a minimum of 5 gals. of water/A broadcast or band by ground equipment of 20 gals. per acre, or by aircraft. One additional application may be made after the sugarcane as it emerges. Applications may be made as directed sprays. If needed, may be applied interline as suggested by manufacturer being prior to close-planting rate of herbicide suggested for sugarcane.

**NOTE:** Where high rates are used alone, apply in a minimum of 5 gals. for each 1 qt. of Atrazine 4L.

**Aerial application:** In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft., using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph.

To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply Atrazine 4L alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

#### Florida

For control of emerged perennials weeds: Apply a directed spray by ground equipment per label directions. 100 gals. of spray. Thoroughly cover weeds.

For control of alexandergrass, large crabgrass, pellitory (artillery) weed, and spiny amaranth, use one of the following methods at planting or ratooning:

1. Apply 8 pts./A preemergence. Follow with one or two applications, as needed, post-emergence to sugarcane and weeds, at 4 pts./A. Treat before weeds exceed 1.5 inches in height.
2. Apply 1-3 times, as needed, at 4 pts./A postemergence to sugarcane and weeds. Treat before weeds exceed 1.5 inches in height.

#### Louisiana

For control of annual weeds during the summer fallow period, apply 4 pts./A to weed-free beds immediately after bed formation. Follow normal weed control program after planting.

Precautions: To avoid crop injury, (1) Do not apply more than 10 qts./A to any one crop of sugarcane. (2) If making 4 pts./A application during summer fallow period, do not exceed 8 qts./A during the remainder of the growing season, or illegal residues may result.

#### Texas

Use Atrazine 4L for control of barnyardgrass, pigweed, purslane and sunflower, in plant or ratoon sugarcane.

Apply 8 pts./A of Atrazine 4L preemergence. Follow with one or two applications, as needed, at 6 pts./A postemergence to sugarcane and weeds.

For best results when weeds are emerged, add a nonionic surfactant at a concentration of 2 qts./100 gals. to the spray and apply before weeds exceed 1.5 inches in height.

Precautions: (1) Injury to sugarcane may occur when under moisture stress, when soil is of low adsorptive capacity, or when land is first cropped to sugarcane. (2) Do not apply after close-in. (3) Do not apply more than 20 pts./A to any one crop of sugarcane, or crop injury may result.

#### Turfgrasses for Sod (Florida only)

St. Augustinegrass, Centipedegrass, and Zoysiagrass

Broadcast 4 - 8 pts./A according to soil texture to control those weeds listed under Atrazine 4L Applied Alone-Corn or Grain Sorghum-Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

Muck or peat	8 pts.	Old beds: Within 2 days after lifting sod.
		New beds: 3-4 days after sprigging or plugging.
Sandy soil	4 pts.	Old beds: Within 2 days after lifting sod.
		New beds: 7-10 days after sprigging or plugging.

If weeds regrow, apply an additional 4 pts./A on muck or peat, or 2 pts./A on sandy soil.

Precautions: To avoid crop injury, (1) Do not (2) Do not apply in combination with surface turfgrass reasonably free of infestations or newly sprigged turfgrass, temporary slown

#### Turfgrass for Fairways, Lawns, Sod Prod

\* In states other than FL. For use on turfi (Florida only) section above.

Bermudagrass, Centipedegrass, St. Aug

Apply Atrazine 4L after of winter annual weed: bluegrass, burclover, c corn speedwell, henbit, Atrazine 4L will contr if it is emerged at time of summer annual weeds section of the Atrazi or Grain Sorghum sect apply Atrazine 4L in la emerge. Apply in a mir per acre or 1 gal. per 1

Where annual bluegrass is the major we h.). Use 2 qts./A (44 ml or 1.5 fl. oz. per 1.0 above. Do not exceed 1 qt./A per treatme mudagrass such as Tiflawn, Tifway, and

For continued summer annual weed con the previous application, but not after A applications of this product per year.

Precautions: On newly sprigged turfgrass of growth and yellowing may occur follow on turfgrass reasonably free of infestation not use on golf greens. (3) Do not use north or west of the high rainfall areas of eastern alkaline soils. (5) Do not apply over the ro this label. (6) Do not overseed with desired after treatment. (7) Do not apply this pro overwintered and has a well-developed n within 12 months of seeding bermudagra

Note: Do not graze or feed turf clippings

#### Macedamia Nuts

For preemergence control of many broad tail, wiregrass, Florida paintbrush, spart before harvest and before weeds emerge are on ground during harvest period. Do

### Quays

Use only on established plantings which are at least 18 months old. Apply as a directed spray at 4 - 8 pts./A of Atrazine 4L in 20 - 50 gals. of spray mix preemergence or early postemergence to weeds. When applying postemergence, the use of a surfactant and greater spray volume (80 - 100 gals. of spray mix per acre) may enhance weed control. This product controls many annual broadleaf and grass weeds, including fireweed, purslane, scarlet pimpernel, spanishneedles, and sowthistle.

NOTES: To avoid illegal residues, (1) Do not allow spray to contact foliage or fruit. (2) Do not apply more frequently than at 4 month intervals. (3) Do not apply more than 16 pts. of Atrazine 4L per year.

### Conifers

For control of annual broadleaf and grass weeds prior to transplanting, after transplanting or in established conifers (including Douglas fir, grand fir, noble fir, white fir, Austrian pine, bishop pine, Jeffrey pine, knobcone pine, loblolly pine, lodgepole pine (shore pine), monterey pine, ponderosa pine, Scotch pine, slash pine, blue spruce, and Sitka spruce): Broadcast 4-8 pts. in a minimum of 5 gals. of water per acre by air or 10 gals. by ground before weeds are 1.5 inches tall. Apply to established trees between fall and early spring while trees are dormant. For new transplants, apply during or soon after transplanting.

For applications prior to transplanting, allow sufficient precipitation to activate Atrazine 4L before transplanting. In areas where spring and summer rainfall is inadequate to activate Atrazine 4L, apply during fall prior to spring transplanting.

For the list of weeds controlled, see Atrazine 4L Applied Alone-Corn or Grain Sorghum-Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

Quackgrass control: Broadcast 8 pts. in a minimum of 5 gals. of water per acre by air or 10 gals. by ground between fall and early spring while trees are dormant and before quackgrass is more than 1.5 inches tall.

Precautions: (1) In areas west of the Rocky Mountains (except the Great Basin), grazing may begin 7 months after a fall application or 3 months after a winter or spring application. (2) To prevent illegal residues, do not graze treated areas of the Great Basin, or areas east

of the Rocky Mountain. to trees may occur 1 4L on coarse-textured injury, do not apply apply only once per year

Aerial application: In order to assure the when used according to label directions, above vegetation, using low drift nozzle application to periods when wind speed will not adversely nontarget plants, appl at a minimum upwind sensitive plants.

## Storage and Disposi

### Storage

Ground water contamination may be re bulk storage sites with an impermeable

### Pesticide Disposal

Do not contaminate water, food, or feed. Open dumping is prohibited. Wastes n toxic. Improper disposal of unused per federal law. Pesticide, spray mixture, o instructions must be disposed of acco guidance in proper disposal methods. Control Agency, or the Hazardous Wa Office.

### Container Disposal

Triple rinse (or equivalent) and offer k dispose of in a sanitary landfill, or by inc and local authorities. If burned, keep o

For minor spills, leaks, etc., follow all p immediately. Take special care to avoid

cleanup procedures a the event of a ma emergency, call 1-800-

## WARRANTY AND

Seller warrants that its chemical descripi for the purposes sta in accordance with conditions of use and

any use contrary to such directions. Seller makes no other express or implied warranty, including any other express or implied warranty of Fitness or of Merchantability, and no agent of Seller is authorized to do so except in writing with a specific reference to this warranty. In no event shall Seller's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.

Caliber 90®, Concep®, Dual®, and Princep® trademarks of CIBA-GEIGY Corporation.

Bexton® trademark of DowElanco.

Gramoxone® and Sutan +® trademarks of ICI Americas.

Lasso®, Ramrod® and Roundup® trademarks of Monsanto Company.

CO-OP trademark of Universal Cooperatives, Inc.

UNIVERSAL COOPERATIVES, INC., MINNEAPOLIS, MN 55440

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TEXT ADDED TO ACHIEVE  
REQUIREMENTS

4 9 1

**RESTRICTED USE PESTICIDE  
(GROUND AND SURFACE WATER CONCERNS)**

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

THIS PRODUCT IS A RESTRICTED USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

Support Document #67

**ATRAZINE 4L HERBICIDE**

For Season-Long Weed Control In Corn, Sorghum, And Certain Other Crops.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

See Additional Precautionary Statements And Directions For Use On Back Panel

**ACTIVE INGREDIENTS:**

Atrazine: 2-chloro-4-ethylamino- 6-isopropylamino-s-triazine .....	40.8%
Related Compounds .....	2.2%
INERT INGREDIENTS .....	57.0%
Total .....	100.0%

Atrazine 4L Contains 4 Lbs. Active Ingredients Per Gallon. Shake Well Before Using. Use Entire Contents At One Time.

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

NOV 18 1994

Net Contents: 2 1/2 Gallons

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

1386-647

EPA Reg. No. 1386-647  
EPA Est. No. 1386-OH-1



## Precautionary Statements

Hazards to Humans and Domestic Animals

### CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Do not breathe vapors or spray mist. Avoid contact with eyes, skin or clothing.

### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks

Mixers and loaders must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Controls Statements:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

**Statement of Practical Treatment:**  
If swallowed: Call a physician (or glasses of water and induce vomiting available, by administering syrup by mouth to an unconscious person.

If inhaled: Remove victim to fresh air, preferably mouth-to-mouth. Get medical attention.

If on skin: Wash with plenty of water.

If in eyes: Flush eyes with plenty of water.

**Note to Physician:** There is no antidote. Induce emesis or lavage with activated charcoal may be considered.

For Medical Emergency extension 138.

### Environmental Hazards

Atrazine can travel (seep or leach) and may be used as drinking water. It is advised not to apply atrazine to (ground water) is close to the surface well-drained. Your local agricultural type of soil in your area and the

This product may not be mixed, abandoned wells, drainage wells, loaded within 50 feet of intermittent and reservoirs. This product may be applied to the points where field surface streams and rivers or within 200 yards. If this product is applied to runoff entry points must be closed.

This pesticide is toxic to aquatic life where surface water is present. Do not apply when wind and drift from treated areas may contaminate water.

### DIRECTIONS FOR USE

It is a violation of Federal law to use

For any requirements specify the agency responsible.

**FAILURE TO FOLLOW THE DIRECTIONS LABEL MAY RESULT IN POC RESIDUES.**

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Waterproof gloves
- Chemical-resistant footwear plus socks

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT covered by the Worker Protection Standard (40 CFR Part 170). This product is used to produce crops in forests, nurseries, or

Do not enter treated areas until sprays have dried. Warnings must be given to be in a treated area. Do not be treated with this product. Do not be given which information that may not be entered into clothing until sprays have dried. Do not take action as described under this label. When oral warnings shall be given in a 15 minute period by workers. Oral warnings is reason to believe that the following information is included in the following treated with Atrazine. Do not enter without PPE until sprays have dried.

### CHEMIGATION PROHIBITION

Do not apply this product in a chemigation system.

**BEST 1**

### General Information

This herbicide controls many annual broadleaf and grass weeds in corn, sorghum, sugarcane, and certain other crops specified on this label. This product may be applied before or after weeds emerge.

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected, and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of this product in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide. Consult with your state Agricultural Extension Service for specific recommendations.

Since this product acts mainly through root absorption, its effectiveness depends on moisture to move it into the root zone. If weeds develop, a shallow cultivation or rotary hoeing will generally result in better weed control.

This product is noncorrosive to equipment and metal surfaces, nonflammable, and has low electrical conductivity.

Avoid using near adjacent desirable plants or in greenhouses, or injury may occur.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

Where the use directions give a range of rates, use the lower rate on coarse-textured soil and soil low in organic matter; use the higher rate on fine-textured soil and soil high in organic matter.

**NOTE:** Universal Cooperatives, Inc., does not recommend applications in combination with other herbicides or oils, except as specifically described on the label.

### Application Procedures

**Ground application:** Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and are the same size. Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 10 gals. of spray mixture/A for all preplant incorporated, preplant surface, preemergence, and postemergence applications (with or without oil or surfactant) with ground equipment.

Use a pump with capacity to (1) maintain 35-40 psi at nozzles, (2) provide sufficient agitation in tank to keep mixture in suspension, and (3) to provide a minimum of 20% bypass at all times. Use centrifugal pumps which provide propeller shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gals./minute/100 gal. tank size circulate through a correctly positioned sparger tube or jets.

Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 18-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

For band applications, calculate amount

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast per acre}$$

**Aerial application:** Use aerial application specified. Apply in a minimum of 1 qt. c. acre. For postemergence treatments or a minimum of 2 gals. of water/A. Avoid coverage cannot be obtained or where

Avoid application to humans or animals spray mist and prolonged contact with and at the end of each day's operation

**Application in water or liquid fertilizer** may replace all or part of the water as a or preplant surface ground application this product with liquid fertilizer and/or not apply in nitrogen solution or crop or crop injury may occur.

**Compatibility Test:** Since liquid fertilizer always check compatibility with herbicide careful when using complete suspension problems are more likely to occur. Compatibility in some instances. The following acre. For other spray volumes, make compatibility using this procedure:

1. Add 1 pint of fertilizer to each of 2 or
2. To one of the milliliters of a for this use, is equivalent to Shake or stir gently

3. To both jars add the appropriate amount used, add them separately with dry concentrates last. After each add appropriate amount of herbicides to

**Dry herbicides:** For each pound each jar.

**Liquid herbicides:** For each pint milliliters to each

4. After adding all ingredients, put lids. Let the mixtures stand 15 minutes. If the mixtures stand 15 minutes precipitates, gels, heavy oily film on If the compatibility agent is needed either mixture separates, but can be long as good agitation is used. If methods of improving compatibility: tion, or (B) add 1/2 of the compatible emulsifiable concentrate or flowable patibility is still observed, do not use

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Application in water plus emulsifiable oil or oil concentrate: Adding emulsifiable oil (petroleum-derived, petroleum-derived oil concentrate, or single or mixed crop-derived oil concentrate) to postemergence water-based sprays in corn and sorghum may improve weed control. However, under certain conditions, the use of either type of oil may seriously injure the crop. To minimize this possibility, observe the following directions:

Use one of the following properly emulsified:

1. A suitable oil concentrate containing at least 1% but not more than 20% suitable emulsifier or surfactant blend.
2. Petroleum-derived oil containing at least 1% suitable emulsifier.

**NOTE:** In the event of a compatibility problem when mixing oil with this product and water, a compatibility agent such as Kem Link should be used. Any of the above oils contaminated with water or other materials can cause compatibility problems and/or crop injury.

**Mixing procedures - all uses:** (1) Be sure sprayer is clean and not contaminated with any other materials, or crop injury or sprayer clogging may result. (2) Fill tank  $\frac{1}{2}$  full with clean water, nitrogen solution, or complete liquid fertilizer. (3) Start agitation. (4) Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface. (5) Pour product directly from container into tank. (6) Continue filling tank until 90% full. Increase agitation if necessary to maintain surface action. (7) Add emulsifiable oil, oil concentrate, or tank mix herbicide(s) after this product is thoroughly suspended. (8) Finish filling tank. (9) Empty tank as completely as possible before refilling to prevent buildup of oil or emulsifiable concentrate residue. Maintain agitation to avoid separation of materials. (10) If an oil or emulsifiable concentrate film starts to build up in tank, drain it and clean with strong detergent solution or solvent. (11) Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent.

**Rotational Crops - All Uses:** (1) Do not rotate to any crop except corn or sorghum until the following year, or injury may occur. (2) If applied after June 10, do not rotate with crops other than corn or sorghum the next year, or crop injury may occur. (3) In the High Plains and Inermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use only when corn or sorghum is to follow corn or sorghum or when a crop of untreated corn or sorghum is to precede other rotational crops. (4) In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to soybeans if the rate applied to corn or sorghum was more than 2.2 lbs./A or equivalent band application rate, or soybean injury may occur. (5) Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer. (6) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes and grasses the year following application, or injury may occur.

## Atrazine 4L Applied Alone - Corn or Grain Sorghum\*

Preplant Surface-Applied, Preplant Incorporated, or Preemergence (or Post-emergence at 4 gals./A With Oil)

Broadleaf and Grass Weeds Controlled

barnyardgrass (watergrass) \*\*\*  
plantain \*\*\*  
green foxtail \*\*\*  
large (hairy) crabgrass \*\*  
wild oats  
witchgrass (*Panicum capillare*) \*\*\*  
yellow foxtail \*\*\*

Postemergence with Emulsifiable Oil:  
Broadleaf Weeds Controlled

annual morningglory	lambquarters
cocklebur	mustards
jimsonweed	pigweed

\* Where there are state/local requirements for maximum rates and/or greater set more restrictive/protective requirements established rate limitations within a lead pesticide control agency for ad to deviate from state use regulations

\*\* Partial control only.

\*\*\* Partial control only on medium- and

### Corn

Preplant Surface-Applied (Broadleaf a textured soil with minimum-tillage or no-till MO, MT, ND, NE, SD, WI, and WY. Apply Table 1 up to 45 days prior to planting. Or two weeks prior to planting. If an unsatisfactory adverse environmental conditions follow appropriately labeled herbicide may t atrazine, do not exceed the labeled rate l

If weeds are present at the time of the atrazine herbicide (for example, Gramoxone® E precautions, and restrictions on the label

Note: To the extent possible, do not move to the surface during planting, or weed

Preplant Incorporated (Broadleaf and ing at rate in Table 1. Apply to the soil and bed preparation. Avoid deep incorporation to planting.

Preemergence or At-Planting (Broadleaf after planting before weed emergence, s

Postemergence (Broadleaf and grass e in height and before corn exceeds 12 inc

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**Table 1: Broadleaf and Grass Weed Control in Corn\***  
**FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE**

- **On Highly Erodible Soils** (as defined by SCS)  
 If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 4 pts./A as a broadcast spray.  
 If the soil coverage with plant residue is less than 30% at planting, a maximum of 3.2 pts./A may be applied.
- **On Soils Not Highly Erodible**  
 Apply 4 pts./A as a broadcast spray.

**FOR POSTEMERGENCE APPLICATION**

If no atrazine was applied prior to corn emergence, apply a maximum of 4 pts./A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (5 pts. of this product) per acre per calendar year.

\* Broadleaf control (eastern CO, western KS, western NE, NM, OK Panhandle, west TX, and eastern WY): On sand, loamy sand, sandy loam, mild to strongly alkaline soil, and all recently leveled soil, apply no more than 2.4 pts./A, either preplant surface, preplant incorporated, or preemergence. On other soils in these areas, apply rate in Table 1 for broadleaf and grass control.

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

Postemergence with emulsifiable oil or oil concentrate in water: Add the following volume of one of the type oils indicated for aerial or ground application unless the oil label specifies otherwise:

Type Oil	Ground Application	Aerial Application
Oil Concentrate (Crop or Petroleum-derived)	1 qt./A	1/2 - 1 qt./A
Petroleum-derived oil	1 gal./A	2 qts./A

**Note:** Crop-derived or petroleum-derived oil concentrates should contain at least 1% but not more than 20% suitable emulsifier or surfactant blend. Petroleum-derived oils should contain at least 1% suitable emulsifier.

**Broadleaf and grass control:** For postemergence control of those weeds listed under Preplant Incorporated and Preemergence, broadcast 4 pts./A plus emulsifiable oil or oil concentrate after weed emergence, but before weeds reach 1.5 inches in height and before corn exceeds 12 inches in height.

**Broadleaf control:** For postemergence control of those weeds listed under Post-emergence with emulsifiable oil or oil concentrate in water, broadcast 2.4 pts./A plus emulsifiable oil or oil concentrate before pigweed and lambsquarters reach 8 inches in height and before all other weeds reach 4 inches in height. A cultivation may be necessary if all weeds are not controlled or if weeds regrow.

**Precautions:** For applications with emulsifiable oil or any breeding stock may be severely injured. (2) Adding other insecticide materials is not recommended, because it may cause crop injury. (3) Store and handle emulsifiable oil with even a small amount of water may not avoid crop injury. (4) Do not apply when conditions are poor fertility, or other factors, or will cause crop injury. (5) Do not exceed 2.5 lbs. active ingredient per acre per calendar year. (6) Postemergence applications 1 inches in height.

**Tank Mixtures for Corn**

This product may be tank mixed with these grass weeds in corn:

Qual® (metolachlor)  
 Dual + Gramoxone Extra  
 Dual + Roundup (glyphosate)  
 Dual + Princep®  
 Dual + Princep + Gramoxone Extra  
 Dual + Princep + Roundup  
 Bexton® or Ramrod® (propanachlor)  
 Lasso® or Lasso EC (alachlor)

Use tank mix directions appearing on the label with this product. Observe all precautions used in a particular tank mix.

**NOTE:** When the labels refer to atrazine 80W, Atrazine 4L. One lb. of 4L.

Princep 80W, Princep 4L,

In addition to the weeds listed under 4L Applied Alone - Corn Surface-Applied, Preemergence, this controls crabgrass, fall panicum,

Broadcast tank mix before planting, at plant emergence, at rates in Table 2. Use the ratio for expected heavy infestations of corn if weeds develop.

Preplant Surface-Applied: Use on no-till or no-till systems only in CO, IA,

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and WY. Apply the recommended rate of Atrazine 4L and Princep shown in Table 2 up to 45 days prior to planting. Refer to the Atrazine 4L alone section for information if weeds should develop following the early treatment. On coarse-textured soils, do not apply more than two weeks prior to planting. Refer to the Atrazine 4L Alone-Preplant Surface-Applied section of the corn label for additional details.

If weeds are present at time of treatment, apply in a tank mix combination with a contact herbicide (for example, Gramoxone Extra or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide.

Note: To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

Preplant Incorporated: Apply to the soil and incorporate in the spring before, during, or after final seedbed preparation. Avoid deep incorporation. For best results, apply within two weeks prior to planting.

Preemergence: Apply during or shortly after planting, but before crop and weeds emerge.

Refer to Corn sections of this label and to Princep 80W, Princep Caliber 90, or Princep 4L labels for further directions, limitations, and precautions.

Table 2: Tank Mixtures with Princep on Corn

Soil Texture	Broadcast Rate/A			
	1:1 Ratio*		1:2 Ratio**	
	This Product	Princep 80W <sup>1</sup>	This Product	Princep 80W <sup>1</sup>
Sand, loamy sand, sandy loam	2 pts.	1.25 lbs.	1.32 pts.	1.67 lbs.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with low organic matter	2.4 pts.	1.5 lbs.	1.8 pts.	2 lbs.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with medium to high organic matter, and clay (including dark prairie soils of the Corn Belt)	3 pts.	1.8 lbs.	1.92 pts.	2.4 lbs.

\* For control of most weeds.

\*\* For control of expected heavy infestations of crabgrass and fall panicum.

<sup>1</sup> When using Princep Caliber 90 or Princep 4L, use equivalent rates. One lb. of Princep 80W equals 0.9 lb. of Princep Caliber 90 or 1.8 pts. of Princep 4L.

Princep 80W, Princep 4L, or Princep Caliber 90 plus Roundup: Use as tank mixture for preemergence and postemergence control of certain broadleaf and grass weeds where corn will be planted directly into a cover crop, established sod, or in previous crop residues. Refer to Roundup label for all directions, weeds controlled, precautions, and limitations.

Princep 80W, Princep 90 plus Gramoxone Extra with Princep and Gramoxone vegetation and for corn will be planted established sod, or Add this product and tank, agitating until add Gramoxone Extra such as Aquagene 90. application. Broadcast plus 1.25 - 2.5 lbs 4 pts. of Princep 4L Princep Caliber 90) Gramoxone Extra in 2 sprayed acre. Refer label for the appropriate tank mixture. after planting, but 0.5 pt. of a nonionic 90, per 100 gals. a higher rate of Gram the label if existing tall. This mixture within 6 inches.

Refer to further limitations and precautions Gramoxone Extra.

Precautions: For all applications to corn, not apply more than 2.5 lbs./A active ingredient. (2) For best control of velvetleaf and other weeds, apply 1.5 lbs./A active ingredient, either alone or with Roundup (moldboard or disk-plow) and the injury to spring-seeded rotational crops.

Note for all applications to corn: Do not apply within 14 days following application, or illegal in some states.

Sorghum and Sorghum-sudan Hybrids

Preplant Surface-Applied (Broadcast) textured soil with minimum-tillage or no-tillage.

MN, MO, MT, ND, NE, recommended rate of 3 up to 45 days prior to planting. If unsatisfactory length of control is observed, apply a second application within 14 days of the first application.

from adverse environmental conditions following early treatment, a follow-up application of an appropriately labeled herbicide may be used. If the follow-up treatment includes atrazine, do not exceed the labeled rate for corn indicated in Table 1. Under dry conditions, irrigation after application is recommended to move Atrazine 4L into the soil.

If weeds are present at time of treatment, apply in a tank mix combination with a contact herbicide (for example, Gramoxone Extra or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide.

Note: To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

**Preplant Incorporated (Broadleaf and grass control):** Broadcast in spring after plowing at rate shown in Table 3. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation. For best results, apply within two weeks prior to planting.

**Preemergence (Broadleaf and grass control):** Apply during or shortly after planting, but prior to weed or crop emergence at rate shown in Table 3.

**Postemergence (Broadleaf and grass control):** Apply at rate shown in Table 3 before weeds exceed 1.5 inches in height and before sorghum exceeds 12 inches in height.

**Table 3: Broadleaf and Grass Weed Control in Sorghum<sup>1,2</sup>**

**FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE**

- On Highly Erodible Soils (as defined by SCS)
  - If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 4 pts./A as a broadcast spray.
  - If the soil coverage with plant residue is less than 30% at planting, a maximum of 3.2 pts./A may be applied.
- On Soils Not Highly Erodible
  - Apply 4 pts./A as a broadcast spray.

**FOR POSTEMERGENCE APPLICATION**

If no atrazine was applied prior to corn emergence, apply a maximum of 4 pts./A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (5 pts. of this product) per acre per calendar year.

<sup>1</sup> Do not apply preplant surface or preplant incorporated in AL, AR, FL, GA, LA, MS, NC, NM, OK, SC, TN, or TX. Do not apply preemergence in NM, OK, or TX, except in northeast OK and the TX Gulf Coast and Blacklands areas.

<sup>2</sup> Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

In case of planting failure, sorghum or broadcast application, or injury may occur corn is replanted in untreated row mid second planting provided the maximum calendar year is not exceeded.

**Preemergence broadleaf weed control (CA only):** For preemergence control after bed preparation, during or after 1 and before the first furrow irrigation. Fit to thoroughly wet all soil.

**Precautions for preemergence application (CA):** To avoid possible sorghum injury, do not plant in furrows. Applications to sorghum have exposed calcareous or all failure, do not replant sorghum for 8 m immediately.

**Postemergence broadleaf weed control (water):** Broadcast 2.4 pts./A for control and lambquarters reach 6 inches in height. In CO, western KS, NM, OK, TX sorghum is 6-12 inches in height. In 3-leaf stage but before it exceeds 12 in ground application and 0.5 gal./A for sorghum for ground application. A cultivation m if weeds grow.

For the list of weeds 4L Applied Alone-Corn emergence with Emulsifiable Water.

**Precautions for applications with emulsions for applications with emulsifiable**

**Postemergence broadleaf weed control (TX, and desert regions of AZ and surfactant after sorghum reaches 6 in height. Apply only on sandy loam**

**Precautions:** For all applications to a cation tends to cause excessive corn possible crop injury. Do not apply a (plowed in). Level deep planter marks sorghum growing under stress causes on highly calcareous soil may result in or disk-plow) and thoroughly till soil seeded rotational crops, regardless of preplant surface, preplant incorporated insecticide applied in-furrow are used (5 pts. of this product) per acre per emergence (except for preemergence apply to coarse-textured soils, i.e., saturated soils having less than 1% emergence applications, do not apply

Note: Do not graze or feed forage from treated areas for 21 days following application, or illegal residues may result.

#### Tank Mixtures for Grain Sorghum

Dual 8E: Use as tank mixture with Dual 8E for control of those weeds listed on the Dual 8E label, as well as on this label. Use this tank mixture only on sorghum seed treated with Concep®. Refer to the Dual 8E label for all directions, precautions, and limitations.

#### Winter Weed Control In Texas

For postemergence control of winter weeds only, such as henbit, seedling dock, and annual thistle on fall bedded land in the Gulf Coast and Blacklands of TX. Apply 0.8 - 1 qt./A postemergence to the weeds in November or December to land that will be planted to corn, grain sorghum, or forage sorghum the following spring. For best results, add a suitable surfactant, such as Aquagene 90, at the rate of 0.5% of the spray volume, an emulsifiable oil at the rate of 1.0% of the spray volume, or an oil concentrate at the rate of 1 qt. per acre.

Normal weed control programs may be used in the following corn, grain sorghum or forage sorghum crop.

Note: Do not plant any crops except corn, grain sorghum, or forage sorghum the spring following this treatment, or illegal residues may result.

#### Atrazine 4L Alone - Chemical Fallow

Wheat-Sorghum-Fallow: To control annual broadleaf and grass weeds following wheat harvest and in the following sorghum crop when grown under minimum tillage, broadcast 6 pts./A to wheat stubble immediately following wheat harvest. If weeds are present at application, remove them with a sweep plow or other suitable implement after application, or use an approved contact herbicide before or after the application of Atrazine 4L. Plant sorghum into wheat stubble the following spring with minimum soil disturbance. Use a surface planter or a planter leaving a shallow furrow. If weeds are present at planting, remove them with a sweep plow or other suitable implement

before planting.

For the list of weed 4L Applied Alone-Corn Surface-Applied, Preplant emergence.

Precautions: (1) Use only on silk boom Wheat-sorghum-fallow cropping sequence sorghum harvest.

Note: To avoid illegal residues, do not grow wheat during period after wheat harvest. To avoid illegal residues and crop injury, label within 18 months following treatment.

Wheat-Corn-Fallow (KS, NE): This practice controls kochia, mustards, pigweed, Russian thistle, and other weeds during period after wheat harvest. Crop grown under minimum tillage.

Follow directions for use, notes, and precautions above, substituting corn for sorghum.

Wheat-Fallow-Wheat (CO, KS, ND): This practice controls cheatgrass (downy brome, chess), corn mustard, Russian thistle, wild lettuce, and other weeds during period of a wheat-fallow-wheat rotation. Apply to stubble ground. Treat only

#### Tank Mixtures for Chemical Fallow

Wheat-Sorghum-Fallow or

Gramoxone Extra: In application, a tank mixture may be used. Broadcast plus a suitable amount of water 20-60 gals. of water. Add 0.5 - 1 pt. of Aquagene 90, per acre. Add Atrazine 4L to thoroughly mix with Extra, followed by a rate of Gramoxone Extra if weeds are 4 - 6 inches tall. Will not control weeds. Apply to stubble ground same fallow period. Refer to label for further directions.

limitations.

Wheat-Fallow-Wheat (CO, KS, ND, NE, SD, and WY)

**Gramoxone Extra:** If weeds are present at application, a tank mix with Gramoxone Extra may be used. Broadcast 1 - 2 pts. of Atrazine 4L plus a suitable amount of Gramoxone Extra in 20 - 60 gals. of water/A by ground equipment. Add 0.5-1 pt. of a nonionic surfactant, such as Aquagene 90, per 100 gals. of spray mixture. Add Atrazine 4L to spray tank first and thoroughly mix with water. Then add Gramoxone Extra, followed by surfactant. Use the higher rate of Gramoxone Extra specified on the label if weeds are 4 - 6 inches tall. This mixture will not control weeds taller than 6 inches. Apply to stubble ground. Treat only once during same fallow period. Refer to Gramoxone Extra label for further directions, precautions, and limitations.

If weeds are present at application and this product is used alone, use either an approved contact herbicide before or after treatment, or tillage after treatment.

Use tillage to control weeds which escape during fallow period. Till before planting. For this product applied alone or in tank mixture with Gramoxone Extra, plant at least 2 inches deep and 12 months or more after application.

**Precautions:** To avoid crop injury, (1) Do not use on sand soil. (2) Do not treat eroded hillsides, caliche and rocky outcroppings, or exposed calcareous subsoil. (3) Do not treat soils of the Rosebud and Canyon Series in western NE and adjoining counties in CO and WY. (4) Do not treat soils with calcareous surface layers. (5) Avoid spray overlap.

**Notes:** Do not graze treated areas within 6 months after application, or illegal residues may result.

**Aerial application:** In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft., using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not

adversely affect adjacent sensitive nontarget plants, apply Atrazine 4L alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

#### Roadsides

To control certain annual weeds in established perennial grasses along roadsides in CO, KS, MT, ND, NE, SD, and WY, including cheatgrass (downy brome, chess), common

(annual) broomweed, little barley, medusahead, cast 2 pts./A in a minimum of 10 gals. of water/A before ground freezes, or after thawing in the spring and before weeds emerge. Examples of weeds controlled: bluestem, bluegrama, bromegrass, buffalo, bluestem, side-oats grama, switchgrass, etc. Temporary discoloration or other harm may occur following application.

**Notes:** To avoid illegal residues, (1) Do not allow livestock to graze treated areas.

#### Sugarcane

For control of many broadleaf and grass weeds, Florida's paintbrush, tortoise, jungle

Atrazine 4L at time of planting but before sugarcane emerges in a minimum of 5 gals. of water/A broadcast or band by ground equipment of 20 gals. per acre, up to 100 gals. per acre. One additional application may be made after the sugarcane as it emerges. Additional applications may be made as directed sprays. If needed, may be applied interline as suggested by label. Being prior to close-planting rate of herbicide suggested for sugarcane.

**NOTE:** Where high rates are used alone, apply in a minimum of 1 qt. of Atrazine 4L for each 1 qt. of Atrazine 4L.

**Aerial application:** In order to assure that area when used according to label directions of 10 ft., using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph.

adversely affect adjacent plants, apply Atrazine 4L at a minimum upwind distance of 400 ft. from sensitive plants.

#### Florida

For control of emerged perennials weeds: Apply a directed spray by ground equipment per label directions. 100 gals. of spray. Thoroughly cover weed

For control of alexandergrass, large crabgrass, pellitory (antillary) weed, and spiny amaranth, use one of the following methods at planting or ratooning:

1. Apply 8 pts./A preemergence. Follow with one or two applications, as needed, post-emergence to sugarcane and weeds, at 4 pts./A. Treat before weeds exceed 1.5 inches in height.
2. Apply 1-3 times, as needed, at 4 pts./A postemergence to sugarcane and weeds. Treat before weeds exceed 1.5 inches in height.

#### Louisiana

For control of annual weeds during the summer fallow period, apply 4 pts./A to weed-free beds immediately after bed formation. Follow normal weed control program after planting.

Precautions: To avoid crop injury, (1) Do not apply more than 10 qts./A to any one crop of sugarcane. (2) If making 4 pts./A application during summer fallow period, do not exceed 8 qts./A during the remainder of the growing season, or illegal residues may result.

#### Texas

Use Atrazine 4L for control of barnyardgrass, pigweed, purslane and sunflower, in plant or ratoon sugarcane.

Apply 8 pts./A of Atrazine 4L preemergence. Follow with one or two applications, as needed, at 6 pts./A postemergence to sugarcane and weeds.

For best results when weeds are emerged, add a nonionic surfactant at a concentration of 2 qts./100 gals. to the spray and apply before weeds exceed 1.5 inches in height.

Precautions: (1) Injury to sugarcane may occur when under moisture stress, when soil is of low adsorptive capacity, or when land is first cropped to sugarcane. (2) Do not apply after close-in. (3) Do not apply more than 20 pts./A to any one crop of sugarcane, or crop injury may result.

#### Turfgrasses for Sod (Florida only)

St. Augustinegrass, Centipedeagrass, and Zoysiaagrass

Broadcast 4 - 8 pts./A according to soil texture to control those weeds listed under Atrazine 4L Applied Alone-Corn or Grain Sorghum-Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

Muck or peat	8 pts.	Old beds: Within 2 days after lifting sod.
		New beds: 3-4 days after sprigging or plugging.
Sandy soil	4 pts.	Old beds: Within 2 days after lifting sod.
		New beds: 7-10 days after sprigging or plugging.

If weeds regrow, apply an additional 4 pts./A on muck or peat, or 2 pts./A on sandy soil.

Precautions: To avoid crop injury, (1) Do not (2) Do not apply in combination with surfac turfgrass reasonably free of infestations ( newly sprigged turfgrass, temporary slow

#### Turfgrass for Fairways, Lawns, Sod Prod

\* In states other than FL. For use on turf (Florida only) section above.

Bermudagrass, Centipedeagrass, St. Au

Apply Atrazine 4L after of winter annual weed bluegrass, burclover, ( corn speedwell, henbit, Atrazine 4L will contri if it is emerged at time of summer annual weeds section of the Atrazi or Grain Sorghum sect apply Atrazine 4L in la emerge. Apply in a mi per acre or 1 gal. per 1

Where annual bluegrass is the major we h.). Use 2 qts./A (44 ml or 1.5 fl. oz. per 1.0 above. Do not exceed 1 qt./A per treatme mudagrass such as Tiflawn, Tifway, and

For continued summer annual weed con the previous application, but not after A applications of this product per year.

Precautions: On newly sprigged turfgrass, of growth and yellowing may occur follow on turfgrass reasonably free of infestation not use on golf greens. (3) Do not use north or west of the high rainfall areas of eastern alkaline soils. (5) Do not apply over the r this label. (6) Do not overseed with cereal after treatment. (7) Do not apply this pro overwintered and has a well-developed n within 12 months of seeding bermudagr

Note: Do not graze or feed turf clippings

#### Macadamia Nuts

For preemergence control of many broad tail, wiregrass, Florida's paintbrush, spari before harvest and before weeds emerge are on ground during harvest period. Do

### Curves

Use only on established plantings which are at least 18 months old. Apply as a directed spray at 4 - 8 pts./A of Atrazine 4L in 20 - 50 gals. of spray mix preemergence or early postemergence to weeds. When applying postemergence, the use of a surfactant and greater spray volume (80 - 100 gals. of spray mix per acre) may enhance weed control. This product controls many annual broadleaf and grass weeds, including fireweed, purslane, scarlet pimpernel, spanishneedles, and sowthistle.

NOTES: To avoid illegal residues, (1) Do not allow spray to contact foliage or fruit. (2) Do not apply more frequently than at 4 month intervals. (3) Do not apply more than 16 pts. of Atrazine 4L per year.

### Conifers

For control of annual broadleaf and grass weeds prior to transplanting, after transplanting or in established conifers (including Douglas fir, grand fir, noble fir, white fir, Austrian pine, bishop pine, Jeffrey pine, knobcone pine, loblolly pine, lodgepole pine (shore pine), monterey pine, ponderosa pine, Scotch pine, slash pine, blue spruce, and Sitka spruce): Broadcast 4-8 pts. in a minimum of 5 gals. of water per acre by air or 10 gals. by ground before weeds are 1.5 inches tall. Apply to established trees between fall and early spring while trees are dormant. For new transplants, apply during or soon after transplanting.

For applications prior to transplanting, allow sufficient precipitation to activate Atrazine 4L before transplanting. In areas where spring and summer rainfall is inadequate to activate Atrazine 4L, apply during fall prior to spring transplanting.

For the list of weeds controlled, see Atrazine 4L Applied Alone-Corn or Grain Sorghum-Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

Quackgrass control: Broadcast 8 pts. in a minimum of 5 gals. of water per acre by air or 10 gals. by ground between fall and early spring while trees are dormant and before quackgrass is more than 1.5 inches tall.

Precautions: (1) In areas west of the Rocky Mountains (except the Great Basin), grazing may begin 7 months after a fall application or 3 months after a winter or spring application. (2) To prevent illegal residues, do not graze treated areas of the Great Basin, or areas east

of the Rocky Mountain to trees may occur 1 4L on coarse-textured injury, do not apply apply only once per year

Aerial applications: In order to assure the when used according to label directions, above vegetation, using low drift nozzle application to periods when wind speed will not adversely nontarget plants, app at a minimum upwind sensitive plants.

## Storage and Disposal

### Storage

Ground water contamination may be re-bulk storage sites with an impermeable

### Pesticide Disposal

Do not contaminate water, food, or feed. Open dumping is prohibited. Wastes are toxic. Improper disposal of unused pesticide, spray mixture, or instructions must be disposed of according to proper disposal methods. Control Agency, or the Hazardous Waste Office.

### Container Disposal

Triple rinse (or equivalent) and offer to dispose of in a sanitary landfill, or by inc and local authorities. If burned, keep o

For minor spills, leaks, etc., follow all p immediately. Take special care to avoid cleanup procedures a the event of a ma emergency, call 1-800-

## WARRANTY AND

Seller warrants that its chemical description for the purposes stated in accordance with conditions of use and

any use contrary to such directions. Seller makes no other express or implied warranty, including any other express or implied warranty of Fitness or of Merchantability, and no agent of Seller is authorized to do so except in writing with a specific reference to this warranty. In no event shall Seller's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.

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